

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Please amend the claims as follows:

1-73. (Cancelled)

74. (Currently Amended) A method for predictively responding to a network management data request, the method comprising:
receiving a first network management data request;
determining if the first network management data request matches a pattern of request defined and stored in advance in a memory, the pattern including one or more expected management data requests;
determining if data responsive to the first network management data request is contained in a cache of prefetched network management data if the first network management data request matches a pattern defined in the memory;
sending a response including the data responsive to the first network management data request, if the data responsive to the first network management data request is contained in the cache and if the first network management data request matches a pattern defined in the memory; and
collecting, if the first network management data request matches a pattern defined in the memory, data responsive to any remaining network management data requests in the matched pattern, wherein the pattern further comprises a periodicity of the network management data requests contained in the pattern, and wherein the network management data request is a Simple Network Management Protocol (SNMP) request.

75. (Previously Presented) The method of claim 74, further comprising:
transmitting the first network management data request to a network management data core to respond to the first network management data request if the first network management data request does not match a pattern defined in the memory.
76. (Cancelled)
77. (Cancelled)
78. (Previously Presented) The method of claim 106, wherein the initiating includes initiating periodic data collections at a rate matching a periodicity of the network management data requests contained in the pattern.
79. (Cancelled)
80. (Previously Presented) The method of claim 74, wherein the determining if a first network management request matches a pattern of request based on at least one of:
a community string;
a network management system IP address; or
a network management system port number.
81. (Cancelled)

82. (Currently Amended) An apparatus for predictively responding to a network management data request, the apparatus comprising:

a storage memory adapted to define and store in advance at least one pattern of request, the pattern of request including one or more expected network management data requests;

a cache memory adapted to store prefetched network management data;

a request classifier configured to determine if a first network management data request matches a pattern defined in the storage memory and further configured to determine if data responsive to the first network management data request is contained in the cache memory if the first network management data request matches a pattern defined in the memory;

a sender coupled to the request classifier configured to send a response including the data responsive to the first network management data request, if the data responsive to the first network management data request is contained in the cache memory and if the network management data request matches a pattern defined in the storage memory; and

a lookahead processor coupled to the request classifier configured to collect, if the first network management data request matches a pattern defined in the storage memory, data responsive to any remaining network management data requests in the matched pattern, wherein the pattern further comprises a periodicity of the network management data requests contained in the pattern, and wherein the network management data request is a Simple Network Management Protocol (SNMP) request.

83. (Previously Presented) The apparatus of claim 82, further comprising:

an interface coupled to the request classifier configured to transmit the first network management data request to a network management data core to respond to the first network management data request if the first network management data request does not match a pattern defined in the storage memory.

84. (Cancelled)
85. (Cancelled)
86. (Previously Presented) The apparatus of claim 107, wherein the lookahead processor is further configured to initiate periodic data collections at a rate matching a periodicity of the network management data requests contained in the pattern.
87. (Cancelled)
88. (Previously Presented) The apparatus of claim 82, wherein the request classifier uses, in determining if a first network management data request matches a pattern, at least one of:
 - a community string;
 - a network management system IP address; or
 - a network management system port number.
89. (Cancelled)

90. (Currently Amended) An apparatus for predictively responding to network management data requests, the apparatus comprising:

 a storage memory adapted to define and store in advance a pattern of request, the pattern including one or more expected network management data requests;

 a cache memory adapted to store prefetched network management data;

 means for determining if a first network management data request contains a pattern defined in the storage memory;

 means for determining if data responsive to the first network management data request is contained in the cache memory if the first network management data request contains a pattern defined in the storage memory;

 means for sending a response including data responsive to the first network management data request if the data responsive to the first network management data request is contained in the cache memory and if the first network management data request matches a pattern defined in the storage memory; and

 means for collecting, if the first network management data request matches a pattern defined in the storage memory, data responsive to any remaining network management data requests in the matched pattern, wherein the pattern further comprises a periodicity of the network management data requests contained in the pattern, and wherein the network management data request is a Simple Network Management Protocol (SNMP) request.

91. (Previously Presented) The apparatus of claim 90, further comprising:

 means for transmitting the first network management data request to a network management data core to respond to the first network management data request if the first network management data request does not match a pattern defined in the storage memory.

92. (Cancelled)

93. (Cancelled)
94. (Previously Presented) The apparatus of claim 108, wherein the means for initiating includes means for initiating periodic data collections at a rate matching the periodicity of network management data requests contained in the pattern.
95. (Cancelled)
96. (Previously Presented) The apparatus of claim 90, wherein the means for determining if a first network management data request matches a pattern uses at least one of:
 - a community string;
 - a network management system IP address; or
 - a network management system port number.
97. (Cancelled)

98. (Currently Amended) A program storage device, readable by a machine, embodying a program of instructions executable by the machine to perform a method for predictively responding to a network management data request, the method comprising:

receiving a first network management data request;

determining if the first network management data request matches a pattern of request defined and stored in advance in a memory, the pattern including one or more expected management data requests;

determining if data responsive to the first network management data request is contained in a cache of prefetched network management data if the first network management data request matches a pattern defined in the memory;

sending a response including the data responsive to the first network management data request, if the data responsive to the first network management data request is contained in the cache and if the first network management data request matches a pattern defined in the memory; and

collecting, if the first network management data request matches a pattern defined in the memory, data responsive to any remaining network management data requests in the matched pattern, wherein the pattern further comprises a periodicity of the network management data requests contained in the pattern, and wherein the network management data request is a Simple Network Management Protocol (SNMP) request.

99. (Previously Presented) The program storage device of claim 98, wherein the method further comprises:

transmitting the first network management data request to a network management data core to respond to the first network management data request if the first network management data request does not match a pattern defined in the memory.

100. (Cancelled)

101. (Cancelled)
102. (Previously Presented) The program storage device of claim 109, wherein the initiating includes initiating periodic data collections at a rate matching a periodicity of the network management data requests contained in the pattern.
103. (Cancelled)
104. (Previously Presented) The program storage device of claim 98, wherein the determining if a first network management request matches a pattern of request based on at least one of:
 - a community string;
 - a network management system IP address; or
 - a network management system port number.
105. (Cancelled)
106. (Previously Presented) The method of claim 74, further comprising:
if the first network management data request matches a pattern defined in the memory, but data responsive to the first network management data request is not contained in the cache, initiating periodic data collections for data responsive to network management data requests in the pattern.

107. (Previously Presented) The apparatus of claim 82, wherein the lookahead processor is further configured to initiate periodic data collections for data responsive to the network management data requests in the pattern, if the first network management data request matches a pattern defined in the memory, but data responsive to the first network management data request is not contained in the cache.
108. (Previously Presented) The apparatus of claim 90, further comprising:
means for initiating periodic data collections for data responsive to network management data requests in the pattern, if the first network management data request matches a pattern defined in the storage memory, but data responsive to the first network management data request is not contained in the cache memory.
109. (Previously Presented) The program storage device of claim 98, wherein the method further comprises:
if the first network management data request matches a pattern defined in the memory, but data responsive to the first network management data request is not contained in the cache, initiating periodic data collections for data responsive to network management data requests in the pattern.
110. (Previously Presented) The method of claim 74 wherein the determining if a first network management request matches a pattern of request is based at least in part on a community string.
111. (Previously Presented) The apparatus of claim 82 wherein the request classifier uses a community string in determining if a first network management data request matches a pattern.

112. (Previously Presented) The apparatus of claim 90 wherein the means for determining if a first network management request matches a pattern of request further comprises means for determining if a first network management request matches a pattern of request based at least in part on a community string.
113. (Previously Presented) The program storage device of claim 98 wherein the determining if a first network management request matches a pattern of request is based at least in part on a community string.